

CLAIMS

What is Claimed:

1. An isolated O8E polypeptide comprising a sequence set forth in any one of SEQ ID NOs: 392 and 393 or a fragment thereof that binds an antibody having specificity for a sequence set forth in any one of SEQ ID NOs: 392 and 393.

2. An isolated O8E polypeptide according to claim 1, wherein the fragment comprises an epitope selected from the group consisting of amino acid residues 61-80 of SEQ ID NO: 392 and amino acid residues 151-170 of SEQ ID NO: 392.

3. An antibody epitope of O8E wherein said antibody epitope is selected from the group consisting of amino acid residues 61-80 of SEQ ID NO: 392 and amino acid residues 151-170 of SEQ ID NO: 392.

4. An O8E peptide that binds HLA-A2 wherein said O8E peptide is selected from the group consisting of SEQ ID NOs: 416- 455.

5. An isolated O772P polypeptide comprising a sequence set forth in any one of SEQ ID NOs: 312, 388, 389 and 390, or a fragment thereof that binds an antibody having specificity for a sequence set forth in any one of SEQ ID NOs: 312, 388, 389 and 390.

6. An isolated antibody or antigen-binding fragment thereof that specifically binds to a polypeptide of claim according to claim 1.

7. An isolated antibody or antigen-binding fragment thereof that specifically binds to a polypeptide of claim according to claim 5.

8. A method for detecting the presence of a cancer in a patient, comprising the steps of:

- (a) obtaining a biological sample from the patient;
- (b) contacting the biological sample with a binding agent that binds to a polypeptide of any one of claims 1 and 5;
- (c) detecting in the sample an amount of polypeptide that binds to the binding agent; and
- (d) comparing the amount of polypeptide to a predetermined cut-off value and therefrom determining the presence of a cancer in the patient.

9. A fusion protein comprising at least one polypeptide according to any one of claims 1 and 5.

10. A composition comprising a first component selected from the group consisting of physiologically acceptable carriers and immunostimulants, and a second component selected from the group consisting of:

- (a) a polypeptide according to any one of claims 1 and 5;
- (b) an antibody according to any one of claims 6 and 7; and
- (c) a fusion protein according to claim 9.

11. A method for stimulating an immune response in a patient, comprising administering to the patient a composition of claim 10.